

AIR FORCE AUDIT AGENCY

Project 7215215

FOLLOWUP AUDIT--AIR FORCE SPACE COMMAND'S  
COMMERCIAL SATELLITE COMMUNICATIONS PROGRAM

13 August 1987

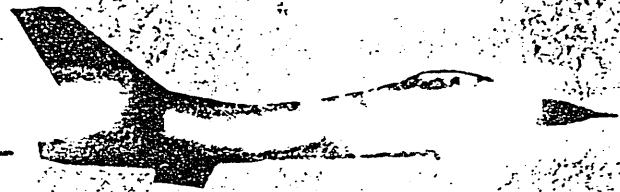
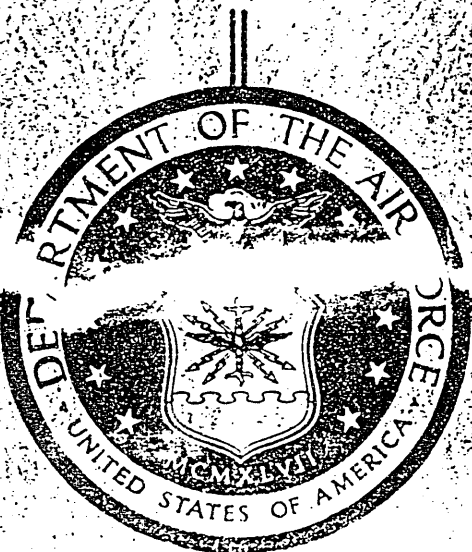
DEPARTMENT OF THE ARMY AND AIR FORCE MANAGEMENT  
NORTON AFB, CALIF. 94501

Project 7215215

13 August 1987

# REPORT OF AUDIT

FOLLOWUP AUDIT--AIR FORCE SPACE COMMAND'S  
COMMERCIAL SATELLITE COMMUNICATIONS PROGRAM



AIR FORCE AUDIT AGENCY



DEPARTMENT OF THE AIR FORCE

HEADQUARTERS AIR FORCE AUDIT AGENCY  
NORTON AIR FORCE BASE CALIFORNIA 92409

PROJECT 7215215

TO THE SECRETARY OF THE AIR FORCE  
AND THE CHIEF OF STAFF

This report summarizes the results of our followup review of management action taken in response to Recommendations 1, 2, 3, 6, and 7 contained in our prior report, Project 5215213, Space Command's Commercial Satellite Communications Program, 25 November 1985. The program's primary purpose was to achieve diversity of both circuit routing and communications media between the North American Aerospace Defense Command Cheyenne Mountain Air Force Station and various missile warning and relay sites. The followup review was conducted at the Deputy Chief of Staff for Plans and Operations (HQ USAF/XO), the Defense Commercial Communications Office, and the headquarters of Air Force Space Command (AFSPACECOM) and Air Force Communications Command.

Our followup review showed that HQ USAF/XO and AFSPACECOM implemented prompt and effective corrective actions in response to the conditions identified in our prior report. This report contains no recommendations requiring corrective action.

A handwritten signature in dark ink, appearing to read "H. Stolardow", is positioned above the typed name.

H. STOLAROW  
Air Auditor General

**FOLLOWUP AUDIT--AIR FORCE SPACE COMMAND'S  
COMMERCIAL SATELLITE COMMUNICATIONS PROGRAM**

**INTRODUCTION**

1. Followup Responsibilities. Tracking the status of corrective actions on audit recommendations is the responsibility of Air Force managers, as prescribed in Air Force Regulation (AFR) 175-2, Followup on Reports of Audit, 23 July 1986. In-depth audit followup is accomplished by the Air Force Audit Agency for selected recommendations in reports of audit to determine whether management has taken the actions agreed to and whether the deficiencies cited in the report were, in fact, corrected. This report documents our followup audit of management actions taken in response to five of the seven recommendations contained in Report of Audit, Space Command's Commercial Satellite Communications Program (Project 5215213), 25 November 1985.

2. Description and Responsibilities. The Air Force Space Command (AFSPACECOM) Commercial Satellite Communications Program's primary purpose was to achieve diversity of both circuit routing and communications media between the North American Aerospace Defense Command Cheyenne Mountain Air Force Station (AFS) and various missile warning and relay sites. This was accomplished by transferring existing secondary missile warning landline data circuits to satellite channels. Implementation was to be accomplished in three phases: Phase 1 in fiscal year (FY) 1983; Phase 2 in FY 1984; and Phase 3 was scheduled for implementation in FY 1986, but was subsequently cancelled due to a lack of validated requirements. Policy guidance and regulatory requirements for leasing communications capabilities are contained in AFR 700-3, Information Systems Requirements Processing, 30 November 1984, and AFR 700-5, Information Systems Requirements Board, 9 November 1984.

3. Prior Audit Findings. Our previous review disclosed that essential steps in the program development process were not performed, and internal control procedures were not effectively established or implemented to ensure the effective and economical use of leased satellite communications capabilities.

a. Program Management. Controls were not effective for (1) identifying and validating all AFSPACECOM Commercial Satellite Communications Program channel requirements, (2)

planning for the operational use of all channels and the timely transfer of landline circuits to satellite channels, and (3) documenting the need and justification for satellite channels. As a result, unnecessary Phase 2 lease costs of about \$2.6 million were incurred in FY 1984.

b. Evolving Missile Warning Requirements. AFSPACECOM had not evaluated the potential impact of technical changes (e.g., the fusion of strategic and tactical ballistic missile, air defense, space defense, and intelligence data into one Integrated Tactical Warning/Attack Assessment system exclusively using survivable communications) on the accomplishment of critical missions which use existing satellite communications channels.

c. PACER TOSS<sup>1</sup> Channels. Twenty-eight of the 48 satellite channels connecting Cheyenne Mountain AFS with Thule Air Base (AB) and Sondrestrom AB were not used. Channel requirements had not been revalidated and attempts had not been made to identify activities with a potential use for the 28 unused channels. As a result, the Air Force incurred annual lease costs of \$1.3 million for the 28 channels that may have utility to other governmental activities.

#### PURPOSE AND SCOPE

4. Purpose of Followup Audit. The purpose of this review was to determine whether management actions agreed to in Recommendations 1, 2, 3, 6, and 7 in our prior report of audit had been implemented and had satisfactorily corrected the cited deficiencies. Recommendation 1 was addressed to the Deputy Chief of Staff for Plans and Operations (HQ USAF/XO) and dealt with justifying, validating, and documenting requirements for Phase 2 satellite channels in accordance with AFR 700-3 and AFR 700-5. Recommendations 2, 3, 6, and 7 were addressed to AFSPACECOM and dealt with:

a. Placing validated requirements in operational use on Phase 2 satellite channels (Recommendation 2).

---

<sup>1</sup> "PACER" was a name associated with other communications projects, and "TOSS" stood for Thule, Offutt, Sondrestrom Satellite system.

b. Establishing effective internal controls to promote program continuity and efficient resource management (Recommendation 3).

c. Evaluating requirements for satellite channels in relation to specifications of the Integrated Tactical Warning/Attack Assessment architecture (Recommendation 6).

d. Revalidating Thule AB and Sondrestrom AB satellite channel requirements annually, and identifying unused channels to other potential Government users (Recommendation 7).

5. Scope of Followup Audit. Our followup review was conducted during May and June 1987 at HQ AFSPACOM, Peterson AFB; HQ Air Force Communications Command (AFCC) and the Defense Commercial Communications Office (DECCO), Scott AFB; and HQ USAF/XO.

a. The review involved: (1) evaluation of Phase 2 program documentation (e.g., requests for services, telecommunications service requests, communications services requirements documents, in-effect reports, meeting minutes, and Memoranda for the Record); (2) review of internal control procedures and annual reports; and (3) verification of status reports and cancellation actions.

b. We examined documentation related to all 69 Phase 2 and all 48 Thule AB and Sondrestrom AB satellite channels and evaluated management decisions made during the period December 1984 to May 1987. Annual lease costs incurred for the 69 Phase 2 channels totalled \$1.8 million; annual lease costs for the 48 Thule AB and Sondrestrom AB channels also totalled \$1.8 million. Our evaluation was performed in accordance with generally accepted Government auditing standards and, accordingly, included such tests of internal controls as we considered necessary under the circumstances. A draft of this report was issued to management in June 1987.

#### OVERALL EVALUATION

6. HQ USAF/XO and AFSPACOM had taken positive actions to implement the management actions agreed to in response to our recommendations. Management actions satisfactorily corrected the cited deficiencies. Specifically, we determined that:

## PARTIAL TRANSCRIPTION - ORIGINAL FOLLOWS

d. AFSPACECOM had established a policy that all information systems requirements pertaining to the Integrated Tactical Warning/Attack Assessment system must be coordinated through, and endorsed by, the AFSPACECOM Systems Integration Office (responsible for the Integrated Tactical Warning/Attack Assessment architecture). Our review of the requirements validation and approval process showed that all satellite channel requirements documents had been endorsed by the Systems Integration Office.

e. AFSPACECOM had submitted Thule AB and Sondrestrom AB satellite channel requirements to the AFSPACECOM Information Systems Staff officer for revalidation on an annual basis. In addition, AFSPACECOM, in coordination with AFCC and [illeg], had attempted to identify other Government activities with a potential need for the 28 unused channels. As of 29 May 1987, 2 of 28 channels had been placed into use, and the remainder were being evaluated for use in conjunction with various warning system upgrade programs (e.g., North Warning System). We were informed that cancellation actions

a. HQ USAF/XO established close coordination with AFSPACECOM to ensure Phase 2 satellite channel requirements were justified, validated, and documented in accordance with AFR 700-3 and AFR 700-5. As a result, cancellation actions were initiated for 33 of the 69 Phase 2 satellite channels. This action will reduce total annual lease costs by over \$543,000.

b. As of 29 May 1987, AFSPACECOM had placed validated requirements in operational use on 19 Phase 2 satellite channels, requested another 5 channels be used to fulfill validated requirements, validated requirements for the use of 3 additional channels, and initiated validation reviews on requirements for the remaining 9 satellite channels.

c. AFSPACECOM had established internal control procedures that effectively promoted program continuity and efficient resource management. Specific program management responsibilities were assigned, and standard procedures identifying program review, justification, validation, approval, and documentation requirements were established. Our review of program documentation and annual internal control review reports indicated that all recent commercial satellite communications program actions were in compliance with the established internal control procedures.

d. AFSPACECOM had established a policy that all information systems requirements pertaining to the Integrated Tactical Warning/Attack Assessment system must be coordinated through, and endorsed by, the AFSPACECOM Systems Integration Office responsible for the Integrated Tactical Warning/Attack Assessment architecture. Our review of the requirements validation and approval process showed that all satellite channel requirements documents had been endorsed by the Systems Integration Office.

e. AFPA 804 had submitted Kule 48 and Sondrestrom AB satellite channel requirements to the AFSPACECOM Information Systems Staff prior for revalidation on an annual basis. In addition, AFSPACECOM, in coordination with AFPA and DCOM, had attempted to identify other current activities with a potential need for the 28 leased channels. As of 29 May 1987, 19 channels had been placed into use, and the remainder were being evaluated for use in conjunction with various warning system programs (e.g., North Warning System). We were informed that cancellation action



would be initiated for any unused channels not required for the upgrades.

7. This report contains no additional findings or recommendations requiring further corrective action.

DISTRIBUTION

OIG, DoD

SAF/OS  
ASAF/A  
ASAF/M  
ASAF/R  
AF/CC  
SAF/AC  
SAF/IG  
SAF/LL

AF/RE  
AF/SA  
AF/SC  
AF/XO  
NGB

OAIG  
Army Audit Agency  
Naval Audit Service  
AU Library  
DLSIE  
GAO

AAC  
AFCC  
AFLC  
AFSC  
AFSPACECOM  
ATC  
ESC  
MAC  
PACAF  
SAC  
TAC  
USAFE

AFAFC  
AFESC  
AFIS  
AFISC  
AFMEA  
AFMPC  
AFOSI  
AFOSP  
AFOTEC  
AFRES  
ARPC  
SSC  
USAF

FREEDOM OF INFORMATION ACT

The disclosure/denial authority prescribed in AFR 175-4 will make all decisions relative to release of this report to the public.